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Rivera

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(54) **GPS ANTENNA FOR SUBMARINE TOWED BUOY**

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(58) Field of Search **343/709, 710, 343/757, 762, 763**

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(57) **ABSTRACT**

An apparatus including a gimbal and an antenna with a hollowed frustum having a closed end and an open end. The antenna includes a feed stem at the closed end extending as an internal rod into the hollowed frustum. The opposite end of the rod connects to a receiver section extending from an edge of the open end beyond a longitudinal axis of the antenna. The antenna is supported by the gimbal attachable to a container suitable for towing. A pivot at the open end in relation to the center-of-gravity of the frustum allows a swinging arc in relation to the attached gimbal in that the frustum moves by gravity toward the axes of the gimbal such that the receiver section maintains a facing position to the force of gravity.

13 Claims, 6 Drawing Sheets

